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REMARKS

This Amendment A is responsive to the Office Action mailed January 11, 2006. Applicants ask for reconsideration and allowance of claims 1-4 and 6-21 as set forth herein.

The Status of the Claims

Claims 1-21 were examined in the Jan. 11th Office Action.

Claims 1-3, 5-7, 9-14, and 16-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shen, U.S. Patent No. 6,611,850 (hereinafter "Shen") in view of Steele et al., U.S. Published Application No. 2003/0212716 (hereinafter "Steele") in further view of the Background section of the present application (hereinafter "Applicants' Background").

Claims 4 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shen in view of Steele in view of Applicants' Background in view of Devarakonda et al., U.S. Published Application No. 2003/0225801 (hereinafter "Devarakonda") in view of Green et al., U.S. Published Application No. 2003/0220948 (hereinafter "Green").

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Shen in view of Steele in view of Applicants' Background in view of Otsuka et al., U.S. Patent No. 6,564,235 (hereinafter "Otsuka").

Claim 19 also stands rejected under 35 U.S.C. § 112, 2nd paragraph.

The 35 U.S.C. § 112, 2nd Paragraph rejection of claim 19 has been addressed

Claim 19 has been amended to (among other changes) remove the reference to a second application program backup database. Accordingly, it is respectfully requested that the rejection of claim 19 under 35 U.S.C. § 112, 2nd paragraph be withdrawn.

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The present application distinguishes over the references

The present application relates to providing targeted backup and restore of a selected application program, without backing up or altering other data unrelated to the selected application program. In contrast, the references relate to backing up entire hard drives, or targeted files of a hard drive.

In the present application, an application program backup database (56) contains identifying information that identifies stored information including at least files pertaining to the selected application program. The stored information is complete information sufficient for a complete restoration of the application program together with its configuration (at least at page 12 line 29-page 13 line 6). In addition to files, such as program files, library files, or so forth (at least at page 11 lines 18-19), the information may include entries of a common applications registry of the operating system (22), content of a flash interface memory (24), or so forth (at least at page 12 line 32-page 13 line 1).

The identifying information contained in the application program backup database is typically not known to the user. For example, a user of Microsoft Word (an example word processing application program) is typically unaware of which files, applications registry entries, or other information pertain to Microsoft Word. Accordingly, the user who wants to make a backup of Microsoft Word including its current configuration is left to either back up the entire hard drive (which is massive overkill and may still be insufficient, if for example some information is stored on a flash interface memory), or must rely upon reloading Microsoft Word from scratch and reconfiguring the application program manually.

Shen discloses backing up targeted files, for example when the "last modified" date changes (e.g., Shen col. 16 lines

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12-24). Shen does not disclose or fairly suggest backing up information pertaining only to an application program so as to provide targeted application program backup and the ability to restore the application program together with its configuration at the time of backup without altering other application programs. In some embodiments, the information pertaining to the application program may be stored as common applications registry entries, content of a flash interface memory, or in some other format other than complete files. The approach of Shen does not contemplate backing up such piecemeal or sub-file-sized information.

Claims 1-4, 6-11, and 13 patentably distinguish over the references

Claim 1 as set forth herein calls for (among other elements) backing up information associated with the application program including at least files associated with the application program, said information associated with the application program being identified in a backup database, periodically inventorying the one or more storage media to detect a change in the information associated with the application program, and responsive to a detected change, creating an update application program backup of the application program including backing up the information associated with the application program.

Claim 1 further incorporates the restore-related limitation of canceled claim 5, calling for restoring the application program to a state corresponding to a selected creation date by copying information contained in an application program backup having the selected creation date onto the one or more storage media without otherwise modifying or affecting the operating system and other application programs.

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The amendments to claim 1 are supported in the original specification at least at page 12 lines 6-23, and at page 23 lines 3-5.

The Office Action alleges that Shen col. 15 line 66-col. 16 line 6 discloses a backup database such as that of claim 1 (Office Action at page 9, regarding claim 18). This section appears to disclose an arrangement for backing up targeted files, but does not disclose or fairly suggest a database containing information associated with the application program so as to enable targeted backup of the application program.

Moreover, attempting to adapt the approach of Shen to perform the targeted application program backup and restore operations called out in claim 1 would likely be unsuccessful. For example if the information associated with the application program includes entries of the common application registry, the approach of Shen would copy the entire common applications registry file, which includes entries for many applications. The restore operation would then overwrite the entire common applications registry, thus modifying or disabling other application programs also having information stored as entries of the common applications registry.

Claim 11 calls for the information associated with the application program identified in the backup database to include information stored in a flash interface memory, and for recording the contents of the flash interface memory which pertain to the application program. The amendment to claim 11 is supported in the original specification at least at page 12 line 32-page 13 line 1 and by element (24) of FIGURE 1. While Shen discloses backing up targeted files of a hard disk (which, as the Office Action correctly points out, is a non-volatile memory), Shen does not disclose or fairly suggest a method for backing up and

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restoring an application program including recording contents of an interface memory which pertain to the application program.

For at least the above reasons, Applicants respectfully submit that claims 1-4, 6-11, and 13 as set forth herein patentably distinguish over the cited references, and ask for allowance of claims 1-4, 6-11, and 13 as set forth herein.

Claims 14-17, 20, and 21 patentably distinguish over the references

Claim 14 calls for (among other elements) an application program backup software program for creating an application program backup of the application program including copies of files associated with the application program that reside on one or more storage media and copies of entries of the common applications registry pertaining to the application program, the application program backup software program assigning a creation date to each created application program backup corresponding to a date of creation thereof.

Nothing in Shen or the other references discloses or fairly suggests copying entries of a common applications registry pertaining to the application program as part of a system for backing up and restoring an application program including an application program configuration. At most, the skilled artisan reading Shen might, as the Office Action suggests at page 8, choose to copy the common application registry file. This would not provide targeted application program backup and restore, however, because the copied common application registry file contains entries for many application programs and not only the targeted application program. Accordingly, it is respectfully submitted that Shen does not disclose or fairly suggest the targeted application program backup system of claim 14.

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Claim 21 calls for the backup coordinating software program to further detect a change in contents of a flash interface memory which pertain to the application program, and for the application program backup software program to record the contents of the flash interface memory which pertain to the application program in the created application program backup. Nothing in Shen or the other references discloses or fairly suggests these detection and recording operations relating to contents of a flash interface memory which pertain to the application program.

For at least the above reasons, Applicants respectfully submit that claims 14-17, 20, and 21 as set forth herein patentably distinguish over the cited references, and ask for allowance of claims 14-17, 20, and 21 as set forth herein.

Claims 12, 18 and 19 patentably distinguish over the references

Claim 18 has been made independent, and calls for a system for backing up and restoring an application program including its configuration without altering other application programs. An application program backup database contains information that identifies stored information including at least files that pertain to the application program and its configuration. The stored information identified by the application program backup database is complete information sufficient for a complete restoration of the application program together with its configuration. Backup software is configured to copy the stored information pertaining to the application program identified by the application program backup database to create a backup copy of the application program together with its configuration at a date of the backup. Restore software is configured to selectively restore, based on the backup copy, the application program

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together with its configuration at the date of the backup without modifying or affecting other application programs.

At most, Shen discloses targeting selected files for backup. Nothing in Shen fairly suggests an application program backup database that contains information identifying stored information including at least files that pertain to the application program and its configuration, in which the stored information identified by the application program backup database is complete information sufficient for a complete restoration of the application program together with its configuration.

Claim 12 has been placed off of claim 18, and calls for the stored information pertaining to the application program and its configuration identified in the application program backup database to include entries of a common applications registry.

Claim 12 stands rejected under that assertion that it would be "obvious that the associated files in the common application registry could also be selected as target files to be monitored and backed up periodically." (Office Action at page 8). However, the common application registry combines entries of many application programs in a common memory-resident datastore that is occasionally copied to disk without sorting the entries by application program -- hence the name "common" application registry. Attempting to apply Shen to perform application program backup including entries of the common application registry would fail because Shen teaches backing up the entire targeted file if any change has been made to that file. Accordingly, Shen would back up the application program whenever any entry of the common application program has been modified, even if the modification is wholly unrelated to the application program (e.g., a change in the configuration of another application program). Conversely, during restore the entire common application registry would be

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overwritten by Shen, thus overwriting entries for application programs other than the application program being restored.

For at least the above reasons, Applicants respectfully submit that claims 12, 18, and 19 patentably distinguish over the cited references, and ask for allowance of claims 12, 18, and 19.

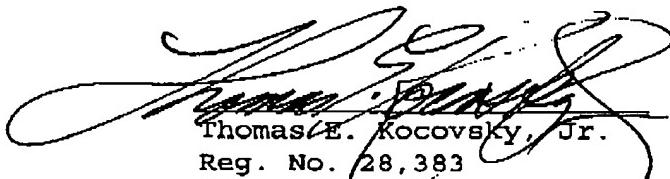
CONCLUSION

Applicants respectfully submit that claims 1-4 and 6-21 as set forth herein are in condition for allowance, and therefore request allowance of claims 1-4 and 6-21 as set forth herein.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is requested to telephone the undersigned at (216) 861-5582.

Respectfully submitted,

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